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ABSTRACT

In this paper, the author reviews the research done on the learning efforts of adults and presents some high-priority directions for the future. The paper first defines major learning efforts (learning projects) and describes some recent changes in the practice and focus of adult education. It then provides a general picture of the frequency of adult participation in learning projects as well as of the duration and planning of these projects. A review then follows of several surveys which provide data on the learning efforts of adults in varied populations. These surveys are grouped according to their focus under the following categories: geographical areas, older adults; occupational categories, educational level, and peer groups. The author also summarizes a few studies that focused on motivation, the learner's planning tasks, and persons who help with the planning. The concluding section suggests eight research and development projects for the future. (EM)

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MAJOR LEARNING EFFORTS:

RECENT RESEARCH AND FUTURE DIRECTIONS

Allen Tough

Ontario Institute for Studies in Education

SESSION 10.16

THE ADULT LEARNER PERSPECTIVE

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Adults spend a remarkable amount of time each year at their major efforts to learn. In fact, a typical learning effort requires 100 hours. And the typical adult conducts five of them a year: 500 hours altogether. Some of these learning projects rely on instructors and classes, but over 70% are self-planned and others rely on friends and peer groups.

This picture of the adult's major learning efforts has emerged in just the past seven years. Many basic surveys and several in-depth studies have contributed to our understanding. This paper presents a review of that research, and some high-priority directions for the future.

At this point, some adult educators may shrug and say, "That's all very fascinating, but it's irrelevant to me. My job is to run classes and workshops." Ah, but perhaps you could widen your horizons and consider another definition of your job: to foster and facilitate the entire range of adult learning. Then you might think of fresh services you could develop. Even narrowing one's thinking to classes and workshops, though, we can see some useful implications for practice. I, too, earn my living through classroom teaching. But I have found my methods changing dramatically (27:147-166) as a result of listening to adults tell about the total panorama of their learning efforts. Their self-planned learning is so successful and enthusiastic that it naturally raises some implications for classroom teaching.

THE PHENOMENON

A phenomenon can be studied more precisely and successfully once its boundaries are clearly defined. One has to know what is included in

the phenomenon and what is not. Fortunately, the definition of a major learning effort, or learning project, has been spelled out in great detail (27.6-15 and 171-173), and virtually all studies have used the same definition. In brief, a learning project is a highly deliberate effort to gain and retain certain definite knowledge and skill, or to change in some other way. To be included, a series of related learning sessions (episodes in which the person's primary intention was to learn) must add up to at least seven hours. A few studies have also examined shorter learning efforts in a supplementary analysis.

The definition has been designed to include the entire range of major learning efforts. Any method can be included -- reading, listening, observing, attending class, reflecting, practicing, getting answers to questions -- if the person's primary intention during that episode was to gain and retain certain definite knowledge and skill. (My shorthand term "knowledge and skill" also includes changed awareness, competence, habits, attitudes, sensitivity, confidence, etc.) Self-planned learning, classroom learning, learning guided by a friend or a group of peers, and learning guided by programmed instruction are all included. Non-credit learning is included along with learning for a degree or a certificate. Learning for highly practical reasons -- to make a good decision, build something, raise a child, perform some task -- is included, as are learning efforts motivated by curiosity, interest, puzzlement, and enjoyment. Already one can see that major adult learning efforts, though tied together by a strict definition, exhibit a fascinating diversity and energy. The vast panorama of adult learning is certainly not dull!

Some related or parallel changes are occurring in the practice of adult education. During the 1950's and 1960's, exciting innovations occurred largely in groups. Examples are small group discussion, panels, student presentations, group dynamics, case studies, films, overhead projectors, etc. During the 1970's much of the innovative practice has focused on the person learning individually, without relying much on a group or its instructor. Examples: learning exchanges, learning contracts, independent study, individual self-planned learning as the primary approach within an academic course, behavioral self-control, and commercially published books to help the individual learner plan and guide learning projects. Those responsible for professional development have recently experimented with procedures for helping individuals design and conduct their own learning: examples include graduate students (Malcolm Knowles), medical doctors (Leonard Stein), mental health professionals (a large funded project at Prairie View), and ministers (through a booklet). Public libraries and Cooperative Extension have always been noted for their help to individual learners, but during this decade several public libraries have joined together in a project to provide more intensive help for the individual.

In both research and practice in adult education, there is some evidence of a shift of focus. The traditional focus: providing education or instruction. The emerging focus: facilitating relevant learning. Roger Sell reflects this shift in the directory of standard terms (for use throughout the field) being developed for the U.S. National Center for Educational Statistics. The directory presents each term from

the standpoint of the learner before presenting the parallel term from the standpoint of a sponsoring institution. And recently the focus of the directory has shifted from "adult and continuing education" to "learning opportunities for adults."

BASIC SURVEYS

How many major learning efforts do people conduct in one year? What are they learning? How much time do they spend? Who plans and guides the learning sessions?

During the past few years, many surveys have studied these questions in various populations. Some of these surveys have sampled all men and women in a particular country, state, or city. Others have focused on groups ranging from adult high-school diploma students to university professors, from the unemployed to the retired, from factory workers and union members to college administrators and extension agents, from members of a literacy class in Jamaica to professionals in an affluent Canadian suburb. Several of the surveys were conducted in various parts of the United States and Canada, and one each in Ghana, Jamaica, and New Zealand.

The Summary Picture

Soon we will turn to the details of several surveys, but first let's look at the general picture.

That basic picture is remarkably consistent from one population to another. The numbers change a little, but the general pattern remains constant. In fact, the really large differences are within any given population, not between populations.

First, how many persons conduct at least one major learning effort during the year before the interview? The answer is probably 90%, though the range from one study to another is from 70% to 100%. Pat Coolican said in her 1974 report (5:13): "It appears the major question is no longer participation vs. nonparticipation. Almost everyone undertakes learning projects to some degree."

Now, if we look at the mean or median person among these men and women, two dramatic statistics emerge.

The typical learner conducts five quite distinct learning projects in one year. He or she learns five distinct areas of knowledge and skill.

The person spends an average of 100 hours per learning effort -- a total of 500 hours per year. Almost 10 hours per week!

Some populations yield lower figures, of course, while others are much higher. Also, in general, the less training the interviewers have in understanding the concept of the learning project and in probing skillfully for additional projects, the fewer learning projects they uncover. Even interviewers trained in depth, however, tell me that they are probably missing some projects because people cannot recall them after several months. Also, one experiment with daily learning diaries yielded higher figures than the interview technique, and Hiemstra tells me that rambling 2½-hour follow-up conversations with his interviewees yielded higher figures than his formal semi-structured interviews.

In whose hands is the day-to-day planning of what and how to learn? That is, who is responsible for planning the detailed subject matter and learning activities from one learning session to the next?

Every study of adults finds a similar pattern, although the exact figures vary a little. The composite picture emerging from the various studies is shown in Table 1.

TABLE 1

PERCENTAGE OF LEARNING PROJECTS USING EACH TYPE OF PLANNER

Self-planned	73
Group	
Led by professional	10
Peers	4
One-to-one helper	
Professional	7
Friend	3
Nonhuman resource	3

Note. To retain clarity, projects without a single dominant planner have been excluded from these calculations. All of the excluded projects include some self-planning plus one or two other planners.

In summary, about 20% of all learning projects are planned by a professional (someone trained, paid, or institutionally designated to facilitate the learning). The professional operates in a group (10%), in a one-to-one situation (7%), or indirectly through completely pre-programmed nonhuman resources such as programmed instruction or a television series (3%). In the other 80% of all learning projects, the

detailed day-to-day planning is handled by an "amateur." This is usually the learner himself or herself (73%), but occasionally is a friend (3%) or a democratic group of peers (4%).

An iceberg is an apt analogy. Let's imagine that the entire range of the adult's learning efforts is represented by an iceberg. For many years we paid attention only to the highly visible portion of the iceberg showing above the surface of the water. We focused our attention on professionally-guided learning. We provided courses, classes, workshops, and other learning groups, plus apprenticeship, tutorials, correspondence study, educational television, programmed instruction, and so on. Virtually everyone still agrees that all of this professionally-guided learning is an incredibly important phenomenon in the world today. At the same time, though, it turns out to be only 20% of the total picture, only the highly visible tip of the iceberg. The massive bulk of the iceberg that is less visible, hidden below the surface, turns out to be 80% of the adult's learning efforts. It consists largely of self-planned learning, though some is planned by other amateurs such as friends and peers. Seeing our professional efforts within this total context is useful: implications arise for fresh services and for our present professional practices.

The most common motivation for a learning project is some anticipated use or application of the knowledge and skill. The person has a task -- raising a child, writing a report for the boss, handling a case, teaching a class, fixing or improving something around the home, sewing a dress -- and learns certain knowledge and skill in order to

perform the task successfully. Less common is curiosity or puzzlement, or wanting to possess the knowledge for its own sake. Also rare is learning for credit toward a degree, certificate, driver's licence, or other certificate: it is about 5% of all learning projects, with the precise figure ranging from less than 1% to 15%.

Geographical Areas

Several surveys sought a basic picture of learning projects in one particular geographical area. In Tennessee, Peters and Gordon (24) interviewed 466 adults in Knoxville and one rural county. About 91% had conducted at least one learning project during the year. Most of their learning projects were job-related or recreational, with smaller numbers for personal improvement, religious, and family relations. Peters and Gordon (24:28-29) found that their interviewees "needed more help in setting goals, locating expert assistance, finding information and materials, dealing with difficult parts of their projects, and finding sources to assist in evaluation" and that "the more highly educated interviewees were more likely to need additional help, as were professionals and males."

Field (9) travelled to Jamaica to interview adults in a literacy class, and Denys (6) and I went to West Africa to interview several groups of educated adults in Ghana. The basic data for learning projects in these two countries are remarkably similar to the findings in the United States and Canada. While training 10 interviewers in New Zealand, too, I encountered learning patterns similar to North America, but the

final data are not yet available.

For a national U.S. survey, 1501 adults across America were interviewed in November 1976. Penland (23) reports a participation rate of 79%, but he included learning efforts of less than seven hours. If we eliminate these shorter efforts from his data, the participation rate falls to 70% according to my calculations. In any given year, then, at least 70% of American adults conduct at least one major learning effort. (Virtually all other studies report a much higher figure. This puzzling mystery might be solved by a probing, leisurely, in-depth survey focused intensively and exclusively on the basic characteristics of learning projects.) Again eliminating the shorter efforts, the mean number of major learning efforts per learner was about 4.1 according to my calculations.

The areas of life in which people used their learning were rank ordered in this way (23:40): personal development, home and family, hobbies and recreation, general education, job, religion, voluntary activity, public affairs, and agriculture/technology. When asked where they preferred to learn, most respondents chose their home, followed by on-the-job training, outdoors, discussion group, classroom, library, and public events, in that order.

Penland was interested in the reasons people have when they choose to learn on their own instead of taking a course. The responses are quite different from the guess that many adult educators would make, and the traditionally cited factors of money and transportation were ranked last. Here is the rank order, beginning with the reasons most often selected as

particularly important (23:32): desire to set my own learning pace; desire to put my own structure on the learning project; desire to use my own style of learning; I wanted to keep the learning strategy flexible and easy to change; I wanted to learn this right away and couldn't wait until a class might start; I didn't know of any class that taught what I wanted to know; lack of time to engage in a group learning program; I don't like a formal classroom situation with a teacher; I don't have enough money for a course or a class; transportation to a class is too hard or expensive.

In an earlier study, also funded by the U.S. Office of Education, Penland (22) studied the learning projects of 128 public library users in Pittsburgh.

Older Adults

Hiemstra (10) and his students interviewed 256 adults, age 55 and older, in Nebraska More than half of their learning projects were for self-fulfillment: the arts, crafts, recreation, and religion. Some were related to personal and family concerns such as mental and physical health, finances, homemaking. Fewer were job related, and only 9% were for social and civic competence.

Hiemstra's survey, like several others, has shattered some of our stereotypes about who does and does not participate in lifelong learning. If we study participation in adult education classes, clear differences show up between different populations. But that may partly occur because persons with high educational attainment have cause to believe that courses are more legitimate or effective than self-planned learning, whereas those

who have had unhappy school experiences very intelligently refuse to repeat that experience and will learn on their own. Turning to participation in learning projects, though, most of these differences disappear. In the number of projects or the number of hours, Hiemstra found no differences according to age, urban-rural, male-female, or Mexican American and White American. Differences according to social class, education, and occupational level occurred only in the number of projects, not in total number of hours.

Occupational Categories

Several surveys have focused on the learning efforts of a particular occupational group.

Studying unemployed adults in New Jersey, Johnson, Levine, and Rosenthal (13:16) found "a fascinating and rich range of learning activity among those who are out of paid work," with 86 out of the 100 interviewees recalling at least one learning project from the past year. This learning included new coping skills required by being unemployed, and efforts to find and prepare for a job, in addition to the usual range of learning.

A picture of the learning patterns of mothers with pre-school children was provided by Coolican (4). Almost half of their learning revolved around the home and family, another 18% around hobbies and recreation, and 11% personal development. The categories of public affairs, general education, vocational, and religious were each below 10%.

A randomly selected group of professional men conducted a mean of 11 learning project in one year, and devoted 1244 hours to them (16). Their job-related learning (55% of the total) included generally keeping up with

the literature and new discoveries, as well as learning in order to handle particular cases. An interesting variance, also noted in passing in some other surveys, occurs in the average number of hours per project: 148 hours for self-planned, but 48 for group learning and 79 for one-to-one.

McCatty (16) also asked the reasons for choosing the type of planner. The most common reason for choosing self-planning was the desire for individualized subject matter: the person wanted to learn certain particular things, not a general survey of a field. The most common reason for choosing a group or private instruction was the capability of the instructor. McCatty also found the percentage of projects using each type of planner varied sharply from one subject matter area to another. A group was especially common for religious learning (47% of all religious projects) and academic learning, one-to-one was common for personal development (29%), and self-planned for current events (96%) and vocational learning (79%).

Several researchers have studied school teachers as learners. In Canada, Fair (7) interviewed beginning elementary-school teachers. In the United States, Kelley (14) compared beginning secondary-school teachers with those who had taught 10-15 years: there were no significant differences in the number of learning projects, but there were differences in reasons and difficulties. Miller (18) interviewed teachers in one non-urban area of upstate New York. In Ghana, Denys (6) interviewed secondary-school teachers. In Canada, McCatty (17) surveyed physical and health education teachers. All found that teachers are just like anyone else when it comes to their own learning: their many major learning efforts are largely self-planned and non-credit. Of the 21 physical education teachers engaged in

a fitness program for themselves, for example, none did so in a group. These studies all suggest the need for fresh approaches for facilitating the teacher's efforts at professional improvement. Teachers are receiving relatively little help now from employers and from faculties of education.

Other professionals, too, have been studied as learners. Miller and Botsman (19) found that Cooperative Extension agents averaged 12 projects per agent. Unlike most populations, though, they turned to workshops and experts for over half of their learning, and planned only 40% themselves. Benson (3) found that 84% of the learning projects by college and university administrators were job-related. The parish ministers who kept learning diaries for Allerton (1) devoted 62% of their projects to their vocation. In particular, they learned in order to deliver sermons or lessons; to prepare for administrative decisions related to program, membership, or professional staff of the church; or to perform committee responsibilities outside the local church. Johns (11) found that pharmacists in Atlanta devoted 30% of their learning projects to vocational subject matter, 26% to hobbies and recreational learning, 14% to home and family, and 10% to public affairs.

Educational Level

Johnson (12) studied adults who had just completed their high school examinations (including GED) in Ft. Lauderdale. The typical interviewee had conducted 13 or 14 learning projects during the year: the range was 6-29.

Armstrong (2) found a remarkable amount of learning among unemployed

adults of low educational attainment. His descriptions of their learning, and of how the high learners had at some stage been turned on, are particularly vivid.

Peer Groups

Much adult learning occurs in a group of peers with a common interest or problem, meeting without a professional or trained expert. Social scientists are paying more and more attention to this phenomenon, with two journal issues (Journal of Applied Behavioral Science and Social Policy) being devoted to the self-help movement in 1976-77. Farquharson (8) discovered a remarkable range of self-help groups. They were effective not only in helping the person deal with the problem (such as drinking, gambling, weight, physical handicap, bereavement, child raising), but also in improving self-confidence and the ability to relate to other people effectively and helpfully.

MOTIVATION, TASKS, AND HELP

Up to this point, we have been looking at surveys that gathered data on such basic questions as the frequency, duration, and planner of learning projects. In addition, many of them explored various other questions and aspects too numerous to be summarized here.

We turn now to a few studies that focused in great depth and detail on such aspects as motivation, the learner's planning tasks, and help.

Moorcroft (20) probed into the origin of current learning projects, sometimes going back 20 years or more before the interview. These origins were usually recalled vividly. Most were pleasant, but some of the

earlier childhood origins were unpleasant. The origins largely concerned family interrelationships or school experiences. Clearly "the motivation path leading to an important learning project is a complex one" (20:172).

Tough (26) probed intensively into various reasons for beginning and continuing a major learning effort, and later (27:47) presented his revised conceptual framework. Unfortunately, no one has tested the revised framework yet.

In self-planned learning, the adult must perform many of the planning tasks that would be performed by the instructor during a course. An early study (25) found that the learner retains the responsibility for the tasks while receiving help from a mean of 10.6 persons, largely acquaintances. A more detailed list of planning tasks during self-teaching was presented later (27:65-69, 81-82, and 94-96).

Morris (21) studied the learner's planning steps in great detail. He found that usually the first planning step was to clarify a general problem or issue. This was followed by an awareness of the need to learn or a decision to begin a learning project. General long-term objectives were established next, and then the learner identified and obtained resources. The steps beyond this point varied greatly from one person to the next.

According to Morris (21:195), the most common problems or difficulties were "(1) in knowing how to start their learning projects (setting objectives); (2) in finding or making time to learn (setting objectives and scheduling) and (3) in knowing whether or not they were progressing or had accomplished what they had set out to do."

Another detailed in-depth study was conducted by Luikart (15). He focused on the persons (an average of 10.3) who helped with self-planned learning projects. Almost two-thirds of the helpers provided sustained help, giving information or assistance three times or more. The amount, source, and type of help received by the learners was significantly associated with differences in the size, density, and composition of their personal social networks.

FUTURE DIRECTIONS

What else do we need to know about major learning efforts during adulthood? And what fresh practices should we be developing?

After reflecting on the recent literature, I conclude that the following research and development projects have the highest potential benefit as our next steps. By initiating and supporting such projects, governments and foundations as well as professional adult educators could move us toward a world of highly competent learners receiving very useful help with their choosing and guiding process.

1. We need an in-depth survey to collect accurate basic data from the men and women of various countries in the world. These surveys would use intensive semi-structured interviews, with highly skilled probing by interviewers thoroughly familiar with the concept of a learning project. Each interview would take up to one hour to collect basic data on exactly what knowledge and skill the person was trying to gain, the number of projects, their duration, and the planner. A supplementary data analysis could provide separate statistics for learning projects aimed primarily at

personal growth, understanding the world, spiritual growth, and answering the basic questions in life. (This might help bring together the lifelong learning movement, the human growth movement, and spiritual growth.) Detailed information could also be collected on peer learning groups and self-help groups such as local historical and scientific societies, Bible study groups, garden clubs, consciousness-raising groups, and committees that learn intensively about a problem before making a decision.

2. Another possibility is an expansion to a wider geographical area of my current (1977-78) survey of Metropolitan Toronto. It asks interviewees to describe their largest intentional change of any kind over the past two years -- not just learning projects, but also deliberate changes in activities, habits, job, relationships, or environment. We also ask about their planning/guiding tasks and the assistance with them, and the additional assistance and competence that would have been beneficial.

3. We know remarkably little about what motivates people to devote 100 hours to learning something. This is especially true when the main benefits are not highly practical and useful. Fascinating insights could emerge from an in-depth study of the adult's anticipated benefits from a major learning effort. We need to study the individual's significant goals and priorities as a context within which to embed our theory and practice.

4. Another high-priority need is some detailed studies of unmet needs concerning peer self-help groups. Only after studying them sympathetically and insightfully will we be able to develop better help

for them, or for people who are seeking them. The sequence is important (27:146): "As with self-planned learning, we must first understand how the learning proceeds in its natural form. Only then will we be ready to fit our help into that natural process without disrupting it." Farquharson, for example, after studying such groups in Toronto, developed a directory of local groups for distribution by the Red Cross.

5. Thoughtful efforts to explore the implications for public policy could be very useful. I strongly believe that governments and other public institutions should actively initiate and support the other seven priority areas in this section. In addition, they could explore the implications of the recent fresh picture of adult learning for other areas of legislation and programs. Example: the dramatic and important implications that Ziegler's final report (28) spells out should be taken seriously, studied, tested, and perhaps extended. Example: because professionals already spend an enormous amount of time at learning, perhaps they should retain their licences by periodic testing of their knowledge and skill, whereas the present tendency is to legislate how they must learn. Example: for achieving certain goals of government, it might be much less expensive to facilitate self-planned or peer-group learning than to provide instructional programs.

6. To foster the development of effective public policy and fresh services, we urgently need further in-depth studies of four intertwined phenomena: the choosing, planning, and guiding steps that learners perform at the early stages and throughout their learning (21) (24:29) (25); how help from books and individuals fits into these steps; what goes wrong

with the person's efforts to get help (27:104-110); the additional help and competence from which learners would benefit most. Such insights would help us make better decisions about just what fresh services, books, programs, and help would provide the greatest benefit for the adult learner, compared to the cost.

7. One finding is clear: adults want additional help and competence with planning and guiding their learning. Hopefully adult educators will respond by adopting a fresh, broader purpose: to foster the entire range of major learning efforts, not just group instruction and pre-programmed courses. One especially useful service would be to produce and distribute printed tools that help adults clarify their needs, choose their learning goals, plan their overall strategy, and guide the learning process. Government printers, public libraries, and bookstores handle countless books and booklets on how to grow vegetables, care for children, repair your home, and cook -- but not on how to choose and guide your learning. Printed tools for the adults being served could usefully be produced (and given, lent, or sold) by virtually any adult education institution, counseling or educational brokering center, staff development department, government department, professional association, or graduate program. Printed tools can make adults aware of countless opportunities and resources for self-planned learning as well as opportunities for group instruction (as the Metropolitan Toronto directory of continuing education does each fall) and for one-to-one instruction (as local skill or learning exchanges do).

8. Similar functions can be performed not only through print, but also through groups and one-to-one counseling. Again, the purposes would

be to foster the entire range of learning, whether it occurs through a group taught by an instructor, a group of peers, or a self-planned effort. The counseling or groups would be designed to help each person (1) clarify problems, needs, wants, interests, or options; (2) gain self-insight or an accurate self-assessment; (3) examine a variety of options, both self-planned and professionally-planned; (4) set priorities and choose one or two particular directions for learning; (5) choose the general overall strategy, including the type of planner and the particular resources; (6) perform the various tasks required for guiding the learning effort through to a successful conclusion. In addition, we could try to develop counseling or groups or print that would increase the individual's competence at the steps just listed, and at choosing various methods and media. As a result, more and more learners will combine the delightfully effective qualities of Margaret Mead, Jonathan Livingston Seagull, and a cross-country runner.

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If you are planning or carrying out some innovative practice or research project related to this paper, please let me know. Thanks very much.

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